

WHAT IS CLAIMED IS:

1. A recording medium having a coating layer comprising  
(A) a polyvinyl alcohol resin containing an acetoacetic ester group,  
5 (B) a zirconium compound and  
(C) an inorganic powder  
on the surface of a substrate.
2. The recording medium of Claim 1, wherein said zirconium  
10 compound (B) is a zirconium nitrate compound.
3. The recording medium of Claim 1, wherein said zirconium  
compound (B) is zirconyl hydroxychloride.
- 15 4. The recording medium of Claim 1, wherein polymerization  
degree of said polyvinyl alcohol resin containing an acetoacetic ester  
group (A) is at least 300.
- 20 5. The recording medium of Claim 1, wherein said polyvinyl  
alcohol resin containing an acetoacetic ester group (A) is a reactant of a  
polyvinyl alcohol resin and a diketene.
- 25 6. A process for preparing a recording medium which  
comprises  
a step of preparing a coating solution comprising a polyvinyl alcohol  
resin containing an acetoacetic ester group (A), a zirconium compound  
(B) and an inorganic powder (C) and

a step of applying said coating solution to the surface of a substrate.

7. The process for preparing a recording medium of Claim 6,  
wherein said zirconium compound (B) is a zirconium nitrate compound  
5 and pH of said coating solution is at most 3.5.

8. The process for preparing a recording medium of Claim 6,  
wherein said zirconium compound (B) is zirconyl hydroxychloride.

10 9. The process for preparing a recording medium of Claim 6,  
wherein polymerization degree of said polyvinyl alcohol resin containing  
an acetoacetic ester group (A) is at least 300.

10. The process for preparing a recording medium of Claim 7,  
15 which further comprises a step of adjusting pH of said coating solution  
to at most 3.5 by adding an inorganic acid (D), before said step of  
applying said coating solution to the surface of a substrate.

11. The process for preparing a recording medium of Claim 6,  
20 which further comprises a step of preparing polyvinyl alcohol resin  
containing an acetoacetic ester group (A) by reacting a polyvinyl alcohol  
resin and a diketene, before said step of preparing said coating solution.

12. An recording medium for ink jet printing having a coating  
25 layer comprising  
(A) a polyvinyl alcohol resin containing an acetoacetic ester group,  
(B) a zirconium compound and

(C) an inorganic powder  
on the surface of a substrate.